All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:27:24 ON 19 JUL 2005

=> file caplus uspatfull japio epfull medline biosis embase scisearch
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.42

FILE 'CAPLUS' ENTERED AT 14:28:16 ON 19 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 14:28:16 ON 19 JUL 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'JAPIO' ENTERED AT 14:28:16 ON 19 JUL 2005
COPYRIGHT (C) 2005 Japanese Patent Office (JPO)- JAPIO

FILE 'EPFULL' ENTERED AT 14:28:16 ON 19 JUL 2005
COPYRIGHT (C) 2005 European Patent Office / FIZ Karlsruhe

FILE 'MEDLINE' ENTERED AT 14:28:16 ON 19 JUL 2005

FILE 'BIOSIS' ENTERED AT 14:28:16 ON 19 JUL 2005
Copyright (c) 2005 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 14:28:16 ON 19 JUL 2005
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 14:28:16 ON 19 JUL 2005
Copyright (c) 2005 The Thomson Corporation

=> s (drug delivery) and (glucose or mannose or maltose or dextrose or fructose or (sodium chloride) or NaCl or (sodium citrate) or (sodium phosphate) or (polyethylene glycol) or (polyvinyl pyrrolidone) or (amino acids))
   1 FILES SEARCHED...
   3 FILES SEARCHED...
L1 51603 (DRUG DELIVERY) AND (GLUCOSE OR MANNOSE OR MALTOSE OR DEXTROSE OR FRUCTOSE OR (SODIUM CHLORIDE) OR NACL OR (SODIUM CITRATE) OR (SODIUM PHOSPHATE) OR (POLYETHYLENE GLYCOL) OR (POLYVINYL PYRROLIDONE) OR (AMINO ACIDS))

=> s l1 and (permeation or penetration)(w) enhancer
L2 1919 L1 AND (PERMEATION OR PENETRATION)(W) ENHANCER

=> s l2 and cell and (membrane or junction)
L3 1227 L2 AND CELL AND (MEMBRANE OR JUNCTION)

=> s l3 and (stent or catheter)
L4 134 L3 AND (STENT OR CATHETER)

=> s l4 and (local delivery)
L5 14 L4 AND (LOCAL DELIVERY)

=> d l5 1-14 ibib abs

L5 ANSWER 1 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2005:10954 USPATFULL
TITLE: Antisense modulation of apolipoprotein B-expression
INVENTOR(S): Crooke, Rosanne, Carlsbad, CA, UNITED STATES
Graham, Mark, San Clemente, CA, UNITED STATES
Tarbet, Kristina Lemonidis, Oceanside, CA, UNITED STATES
Dobie, Kenneth, Del Mar, CA, UNITED STATES
PATENT ASSIGNEE(S): ISIS PHARMACEUTICALS, INC., Carlsbad, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005009088	A1	20050113
APPLICATION INFO.:	US 2004-920612	A1	20040817 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2003-712795, filed on 13 Nov 2003, PENDING Continuation-in-part of Ser. No. WO 2003-US15493, filed on 15 May 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-426234P	20021113 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MARSHALL, GERSTEIN & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6357
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
LINE COUNT: 14419
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antisense compounds, compositions and methods are provided for modulating the expression of apolipoprotein B. The compositions comprise antisense compounds, particularly antisense oligonucleotides, targeted to nucleic acids encoding apolipoprotein B. Methods of using these compounds for modulation of apolipoprotein B expression and for treatment of diseases associated with expression of apolipoprotein B are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:292742 USPATFULL
TITLE: Compositions and methods for non-parenteral delivery of oligonucleotides
INVENTOR(S): Teng, Ching-Leou, San Diego, CA, UNITED STATES
Cook, Phillip Dan, Fallbrook, CA, UNITED STATES
Tillman, Lloyd, Oceanside, CA, UNITED STATES
Hardee, Gregory E., Rancho Sante Fe, CA, UNITED STATES
Ecker, David J,, Encinitas, CA, UNITED STATES
Manoharan, Muthiah, Weston, MA, UNITED STATES
PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., Carlsbad, CA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004229831	A1	20041118
APPLICATION INFO.:	US 2004-793497	A1	20040304 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-29598, filed on 21 Dec 2001, GRANTED, Pat. No. US 6747014 Continuation of Ser. No. US 1999-315298, filed on 20 May 1999, PENDING Continuation of Ser. No. US 1998-108673, filed on 1 Jul

1998, PENDING Continuation-in-part of Ser. No. US 1997-886829, filed on 1 Jul 1997, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: CLM-01-15
LINE COUNT: 3521
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods which enhance the local and systemic uptake and delivery of oligonucleotides and nucleic acids via non-parenteral routes of administration. Pharmaceutical compositions comprising oligonucleotides disclosed herein include, for systemic delivery, emulsion and microemulsion formulations for a variety of applications and oral dosage formulations. It has also surprisingly been discovered that oligonucleotides may be locally delivered to colonic sites by rectal enemas and suppositories in simple solutions, e.g., neat or in saline. Such pharmaceutical compositions of oligonucleotides may further include one or more penetration enhancers for the transport of oligonucleotides and other nucleic acids across mucosal membranes. The compositions and methods of the invention are utilized to effect the oral, buccal, rectal or vaginal administration of an antisense oligonucleotide to an animal in order to modulate the expression of a gene in the animal for investigative, therapeutic, palliative or prophylactic purposes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:273827 USPATFULL
TITLE: Antisense modulation of apolipoprotein B expression
INVENTOR(S): Crooke, Rosanne, Carlsbad, CA, UNITED STATES
Graham, Mark, San Clemente, CA, UNITED STATES
Lemonidis-Tarbet, Kristina, Oceanside, CA, UNITED STATES
Dobie, Kenneth, Del Mar, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004214325	A1	20041028
APPLICATION INFO.:	US 2003-712795	A1	20031113 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2003-US15493, filed on 15 May 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-426234P	20021113 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MARSHALL, GERSTEIN & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6357
NUMBER OF CLAIMS: 108
EXEMPLARY CLAIM: 1
LINE COUNT: 14445
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Antisense compounds, compositions and methods are provided for modulating the expression of apolipoprotein B. The compositions comprise antisense compounds, particularly antisense oligonucleotides, targeted to nucleic acids encoding apolipoprotein B. Methods of using these compounds for modulation of apolipoprotein B expression and for treatment of diseases associated with expression of apolipoprotein B are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:268258 USPATFULL
TITLE: Treatment of diabetes
INVENTOR(S): Brand, Stephen J., Lincoln, MA, UNITED STATES
Cruz, Antonio, Toronto, CANADA
Pastrak, Aleksandra, Toronto, CANADA
Hew, Yin, Thornhill, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004209801	A1	20041021	
APPLICATION INFO.:	US 2003-691123	A1	20031022	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2002-420399P	20021022	(60)
	US 2002-420187P	20021022	(60)
	US 2002-428100P	20021121	(60)
	US 2002-428562P	20021122	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL CENTER, BOSTON, MA, 02111
NUMBER OF CLAIMS: 110
EXEMPLARY CLAIM: 1
LINE COUNT: 2614
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods are provided for islet neogenesis therapy comprising a member of a group of factors that complement a gastrin/CCK receptor ligand, with formulations, devices and methods for sustained release delivery and for **local delivery** to target organs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:209825 USPATFULL
TITLE: Compositions and methods for treatment of pouchitis
INVENTOR(S): Wedel, Mark K., Temecula, CA, UNITED STATES
Miner, Philip B., JR., Oklahoma City, OK, UNITED STATES
PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., Carlsbad, CA (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004162259	A1	20040819	
APPLICATION INFO.:	US 2004-777838	A1	20040212	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-447215P	20030213	(60)
	US 2003-518053P	20031107	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 3613
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates methods of treating pouchitis by administering a pharmaceutical formulation suitable for rectal use, such as an enema or suppository, comprising an antisense oligonucleotide targeted to ICAM-1 to an individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:166041 USPATFULL
TITLE: Adhesive coated sheet for dermal delivery of a selective cyclooxygenase-2 inhibitor
INVENTOR(S): Lu, Guang Wei, Ann Arbor, MI, UNITED STATES
Ewing, Gary D., Kalamazoo, MI, UNITED STATES
Stoller, Brenda M., Ypsilanti, MI, UNITED STATES
Kienle, Kathryn M., Kalamazoo, MI, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004127531	A1	20040701	
APPLICATION INFO.:	US 2003-695025	A1	20031028	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-428208P	20021121 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PHARMACIA CORPORATION, Global Patent Department, 575 Maryville Centre Drive, Mail Zone 1006, St. Louis, MO, 63141
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1544
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition for application to an area of skin of a subject for local and/or systemic treatment of a COX-2 mediated disorder comprises a backing sheet that is flexibly conformable to the area of skin, the backing sheet having opposing surfaces that are respectively distal and proximal to the skin when applied; and a coating on the proximal surface of the backing sheet that comprises (a) an adhesive and (b) an active agent comprising valdecoxib or a prodrug thereof or a salt thereof, the active agent being in a therapeutically effective total amount and dispersed in a matrix that comprises zero to less than an active agent solubilizing effective amount in total of one or more solvents other than the adhesive. A method of local treatment of a site of pain and/or inflammation in a subject comprises applying the composition to a skin surface of the subject, preferably at a locus overlying or adjacent to the site of pain and/or inflammation, and leaving the composition in place for a time period effective to permit delivery of a locally therapeutic amount of the active agent. A method of systemic treatment of a subject having a COX-2 mediated disorder comprises applying the composition to a skin surface of the subject, and leaving the composition in place for a time period effective to permit transdermal delivery of a therapeutic amount of the active agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:164929 USPATFULL
TITLE: Dermal delivery of a water-soluble selective cyclooxygenase-2 inhibitor
INVENTOR(S): Lu, Guang Wei, Ann Arbor, MI, UNITED STATES
Ewing, Gary D., Kalamazoo, MI, UNITED STATES

Stoller, Brenda M., Ypsilanti, MI, UNITED STATES
Kienle, Kathryn M., Kalamazoo, MI, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004126415	A1	20040701	
APPLICATION INFO.:	US 2003-683943	A1	20031010	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-428201P	20021121 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PHARMACIA CORPORATION, Global Patent Department, 575 Maryville Cenre Drive, Mail Zone 1006, St. Louis, MO, 63141
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1595
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A pharmaceutical composition for application to an area of skin of a subject for local and/or systemic treatment of a COX-2 mediated disorder comprises a backing sheet that is flexibly conformable to the area of skin, the backing sheet having opposing surfaces that are respectively distal and proximal to the skin when applied; and a coating on the proximal surface of the backing sheet that comprises (a) an adhesive and (b) a water-soluble active agent selected from selective COX-2 inhibitory drugs, prodrugs and salts thereof, the active agent being in a therapeutically effective total amount and dispersed in a matrix that comprises zero to less than an active agent solubilizing effective amount in total of one or more solvents other than the adhesive. A method of local treatment of a site of pain and/or inflammation in a subject comprises applying the composition to a skin surface of the subject, preferably at a locus overlying or adjacent to the site of pain and/or inflammation, and leaving the composition in place for a time period effective to permit delivery of a locally therapeutic amount of the active agent. A method of systemic treatment of a subject having a COX-2 mediated disorder comprises applying the composition to a skin surface of the subject, and leaving the composition in place for a time period effective to permit transdermal delivery of a therapeutic amount of the active agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:38077 USPATFULL
TITLE: Dopamine agonist formulations for enhanced central nervous system delivery
INVENTOR(S): Quay, Steven C., Edmonds, WA, UNITED STATES
PATENT ASSIGNEE(S): Nastech Pharmaceutical Company Inc, Hauppauge, NY (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004028613	A1	20040212	
APPLICATION INFO.:	US 2001-891630	A1	20010625	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 58
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 8045
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Pharmaceutical formulations are described comprising at least one dopamine receptor agonist and one or more mucosal delivery-enhancing agents for enhanced mucosal delivery of the dopamine receptor agonist. In one aspect, the mucosal delivery formulations and methods provide enhanced delivery of the dopamine receptor agonist to the central nervous sytstem (CNS), for example by yielding dopamine receptor agonist concentrations in the cerebral spinal fluid of 5% or greater of the peak dopamine agonist concentrations in the blood plasma following administration to a mammalian subject. Exemplary formulations and methods within the invention utilize apomorphine as the dopamine receptor agonist. Other exemplary methods and formulations focus in intranasal administration of a dopamine receptor agonist. The formulations and methods of the invention are useful for treating a variety of diseases and conditions in mammalian subjects, including Parkinson's disease, male erectile dysfunction, female sexual dysfunction, among others. In alternate aspects, the mucosal delivery formulations and methods of the invention include one, or any combination of, mucosal delivery-enhancing agents selected from (a) aggregation inhibitory agents; (b) charge modifying agents; (c) pH control agents; (d) degradative enzyme inhibitors; (e) mucolytic or mucus clearing agents; (f) ciliostatic agents; (g) **membrane** penetration-enhancing agents; (h) modulatory agents of epithelial **junction** physiology; (i) vasodilator agents; (j) selective transport-enhancing agents; and (k) stabilizing delivery vehicles, carriers, supports or complex-forming agents. These methods and formulations of the invention provide for significantly enhanced absorption of dopamine receptor agonists into or across a nasal mucosal barrier to a target site of action, for example the CNS.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2004:7789 USPATFULL
TITLE: Antisense modulation of **cell** division cycle 2 expression
INVENTOR(S): Dean, Nicholas M., Olivenhain, CA, UNITED STATES
Freier, Susan M., San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): Isis Pharmaceuticals Inc. (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004006029	A1	20040108	
APPLICATION INFO.:	US 2002-189266	A1	20020702	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Jane Massey Licata, Licata & Tyrrell, P.C., 66 East Main Street, Marlton, NJ, 08053
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 4270
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antisense compounds, compositions and methods are provided for modulating the expression of **cell** division cycle 2. The compositions comprise antisense compounds, particularly antisense oligonucleotides, targeted to nucleic acids encoding **cell** division cycle 2. Methods of using these compounds for modulation of **cell** division cycle 2 expression and for treatment of diseases associated with expression of **cell** division cycle 2 are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2003:231669 USPATFULL
TITLE: Skin-permeable selective cyclooxygenase-2 inhibitor composition
INVENTOR(S): Lu, Guang Wei, Ann Arbor, MI, UNITED STATES
Ewing, Gary D., Kalamazoo, MI, UNITED STATES
Tyle, Praveen, Kalamazoo, MI, UNITED STATES
Stoller, Brenda M., Portage, MI, UNITED STATES
Gokhale, Rajeev, Libertyville, IL, UNITED STATES
Gadre, Ashwini, St. Louis, MO, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003161867	A1	20030828	
APPLICATION INFO.:	US 2002-158342	A1	20020530	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-294838P	20010531	(60)
	US 2001-350756P	20011113	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Pharmacia Corporation, Corporate Patent Department, 800 N. Lindbergh Boulevard -04B, St. Louis, MO, 63167
NUMBER OF CLAIMS: 96
EXEMPLARY CLAIM: 1
LINE COUNT: 1990
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A dermally deliverable pharmaceutical composition comprises at least one selective cyclooxygenase-2 (COX-2) inhibitory drug or prodrug thereof solubilized in a pharmaceutically acceptable carrier that comprises a low molecular weight monohydric alcohol, and exhibits a skin permeation rate of the therapeutic agent at least equal to that exhibited by a reference solution of the therapeutic agent in 70% aqueous ethanol. A method of effecting targeted delivery of a selective COX-2 inhibitory drug to a site of pain and/or inflammation in a subject comprises topically administering such a composition to skin of the subject, preferably at a locus overlying or adjacent to the site of pain and/or inflammation. A method of effecting systemic treatment of a subject having a COX-2 mediated disorder comprises transdermally administering such a composition, preferably by contacting the composition with an area of skin of the subject not greater than about 400 cm.sup.2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2003:57931 USPATFULL
TITLE: Compositions and methods for non-parenteral delivery of oligonucleotides
INVENTOR(S): Teng, Ching-Leou, San Diego, CA, UNITED STATES
Cook, Phillip Dan, Fallbrook, CA, UNITED STATES
Tillman, Lloyd, Carlsbad, CA, UNITED STATES
Hardee, Gregory E., Rancho Sante Fe, CA, UNITED STATES
Ecker, David J., Encinitas, CA, UNITED STATES
Manoharan, Muthiah, Carlsbad, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003040497	A1	20030227	
	US 6747014	B2	20040608	
APPLICATION INFO.:	US 2001-29598	A1	20011221	(10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-315298, filed on 20 May 1999, PENDING Continuation of Ser. No. US 1998-108673, filed on 1 Jul 1998, PENDING Continuation-in-part of Ser. No. US 1997-886829, filed on 1 Jul 1997, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Michael P. Straher, Woodcock Washburn LLP, One Liberty Place-46th Floor, Philadelphia, PA, 19103
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 3600
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods which enhance the local and systemic uptake and delivery of oligonucleotides and nucleic acids via non-parenteral routes of administration. Pharmaceutical compositions comprising oligonucleotides disclosed herein include, for systemic delivery, emulsion and microemulsion formulations for a variety of applications and oral dosage formulations. It has also surprisingly been discovered that oligonucleotides may be locally delivered to colonic sites by rectal enemas and suppositories in simple solutions, e.g., neat or in saline. Such pharmaceutical compositions of oligonucleotides may further include one or more penetration enhancers for the transport of oligonucleotides and other nucleic acids across mucosal membranes. The compositions and methods of the invention are utilized to effect the oral, buccal, rectal or vaginal administration of an antisense oligonucleotide to an animal in order to modulate the expression of a gene in the animal for investigative, therapeutic, palliative or prophylactic purposes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 14 USPATFULL on STN
ACCESSION NUMBER: 2000:98407 USPATFULL
TITLE: Antisense modulation of **cell** adhesion molecule expression and treatment of **cell** adhesion molecule-associated diseases
INVENTOR(S): Bennett, C. Frank, Carlsbad, CA, United States
Mirabelli, Christopher K., Dover, MA, United States
Baker, Brenda, Carlsbad, CA, United States
PATENT ASSIGNEE(S): Isis Pharmaceuticals Inc., Carlsbad, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6096722		20000801
APPLICATION INFO.:	US 1998-85759		19980527 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-440740, filed on 12 May 1995, now patented, Pat. No. US 5843738 which is a continuation-in-part of Ser. No. US 1993-63167, filed on 17 May 1993, now patented, Pat. No. US 5514788 which is a continuation of Ser. No. US 1993-969151, filed on 10 Feb 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-7997, filed on 21 Jan 1993, now patented, Pat. No. US 5591623 which is a continuation-in-part of Ser. No. US 1992-939855, filed on 2 Sep 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-567286, filed on 14 Aug 1990, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Elliott, George C.
ASSISTANT EXAMINER: Epps, Janet

LEGAL REPRESENTATIVE: Law Offices of Jane Massey Licata
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 25 Drawing Page(s)
LINE COUNT: 4765
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods are provided for the modulation of expression of cellular adhesion molecules. In accordance with preferred embodiments, oligonucleotides are provided which are specifically hybridizable with nucleic acids encoding intercellular adhesion molecule-1, vascular **cell** adhesion molecule-1, and endothelial leukocyte adhesion molecule-1. Methods of modulating expression of cellular adhesion molecules are provided, as are methods of treating conditions associated with cellular adhesion molecules. In a preferred embodiment, the cellular adhesion molecule is ICAM-1, and a preferred antisense sequence targeted to human ICAM-1 is demonstrated to have clinical utility in several disease indications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 14 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER: 2004:14064 EPFULL
UPDATE DATE PUBLICAT.: 20050421
DATA UPDATE DATE: 20050420
DATA UPDATE WEEK: 200516
TITLE (ENGLISH): Compositions and methods for non-parenteral delivery of oligonucleotides
TITLE (FRENCH): Compositions et procedes pour la delivrance non parenterale d'oligonucleotides
TITLE (GERMAN): Zusammensetzungen und Verfahren fuer nicht-parenterale Verabreichung von Oligonukleotiden
INVENTOR(S): Hardee, Gregory E., 17407 La Brisa, Rancho Santa Fe California 92067, US; Tillman, Lloyd, 4194 Kimberly Lane, Oceanside, CA 92056, US; Cook, Phillip D., 5237 Olive Hill Road, Fallbrook, CA 92028-9470, US; Teng, Ching-Leou, 4571 Mercurio Street, San Diego, California 92130, US; Manoharan, Muthiah, 7634 Reposado Drive, Carlsbad, California 92009, US; Ecker, David J., 1041 Saxony Road, Encinitas, California 92024, US
PATENT APPLICANT(S): ISIS PHARMACEUTICALS, INC., 2292 Faraday Avenue, Carlsbad, CA 92008, US
PATENT APPL. NUMBER: 1382621
AGENT: Hallybone, Huw George, et al, Carpmaels and Ransford, 43-45 Bloomsbury Square, London WC1A 2RA, GB
AGENT NUMBER: 53032
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
LANGUAGE OF PROCEDURE: English
LANGUAGE OF TITLE: German; English; French
DOCUMENT TYPE: Patent
PATENT INFO TYPE: EPA2 Application published without search report
PATENT INFORMATION:

NUMBER	KIND	DATE
EP 1469009	A2	20041020

DESIGNATED STATES: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
APPLICATION INFO.: EP 2004-76653 A 19990520
RELATED DOC. INFO.: EP 1999-924462 19990520
EP 1080103 Parent Application
PRIORITY INFO.: US 1998-82624 A 19980521

ABEN

The present invention relates to compositions and methods which enhance the local and systemic uptake and delivery of oligonucleotides and nucleic acids via non-parenteral routes of administration. Pharmaceutical compositions comprising oligonucleotides disclosed herein include, for systemic delivery, emulsion and microemulsion formulations for a variety of applications and oral dosage formulations. It has also suprisingly been discovered that oligonucleotides may be locally delivered to colonic sites be rectal enemas and suppositories in simple solutions, e.g., neat or in saline. Such pharmaceutical compositions of olignonucleotides may further include one or more penetration enhancers for the transport of oligonucleotides and other nucleic acids across mucosal membranes. The compositions and methods of the invention are utilized to effect the oral, buccal, rectal or vaginal administration of an antisense oligonucleotide to an animal in order to modulate the expression of a gene in the animal for investigative, therapeutic, palliative or prophylactic purposes.

L5 ANSWER 14 OF 14 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER:	1994:44800 EPFULL
DATA UPDATE DATE:	20010221
DATA UPDATE WEEK:	200108
TITLE (ENGLISH):	TRANSMUCOSAL DELIVERY OF MACROMOLECULAR DRUGS
TITLE (FRENCH):	ADMINISTRATION TRANSMUQUEUSE DE MEDICAMENTS MACROMOLECULAIRES
TITLE (GERMAN):	TRANSMUKOSALE VERABREICHUNG VON MAKROMOLEKULAREN MEDIKAMENTEN
INVENTOR(S):	HEIBER, Sonia, J., 1464 Wilson Way, Salt Lake City, UT 84105, US; EBERT, Charles, D., 1515 South Centerbury Drive, Salt Lake City, UT 84108, US; Dave, Sirish C., 7611 South Toni Circle, Salt Lake City, Utah 84121, US
PATENT APPLICANT(S):	THERATECH, INC., Research Park 417 Wakara Way Suite 100,, Salt Lake City Utah 84108, US
PATENT APPL. NUMBER:	919012
AGENT:	Thomson, Paul Anthony, et al, Potts, Kerr & Co. 15, Hamilton Square, Birkenhead Merseyside L41 6BR, GB
AGENT NUMBER:	36701
LANGUAGE OF FILING:	English
LANGUAGE OF PUBL.:	English
LANGUAGE OF PROCEDURE:	English
LANGUAGE OF TITLE:	German; English; French
DOCUMENT TYPE:	Patent
PATENT INFO TYPE:	EPB1 Granted patent
PATENT INFORMATION:	
PATENT INFORMATION:	

NUMBER	KIND	DATE
NUMBER	KIND	DATE
EP 684806	B1	20000308
WO 9418925		19940901
DESIGNATED STATES:	AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE	
APPLICATION INFO.:	EP 1994-908732 A	19940203
	WO 1994-US1372 A	19940203
PRIORITY INFO.:	US 1993-27508 A	19930222
CITED PATENT LIT.:	EP 316168 A	
	WO 9007923 A	
	US 4948580 A	
	US 4994439 A	
	US 5122383 A	